PROCEEDINGS

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A NEW RACE OF LEPIDOCOLAPTES LEUCOGASTER FROM SONORA, MEXICO.¹

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In May, 1933, the author collected two specimens of a dull colored woodhewer near Guirocoba in extreme southeastern Sonora. Comparison of these with large series in the Museum of Comparative Zoölogy and the American Museum of Natural History, convinced him that an undescribed race exists in southern Sonora and Sinaloa. He hesitated to describe it on the basis of two specimens. Recently two new skins have been forwarded to him by collectors in Sinaloa, and a fifth specimen has been found in a previous shipment. These confirm all the characters of the first two specimens and therefore the race is herewith described as new. My thanks are offered to Dr. Thomas Barbour and Mr. James L. Peters for placing the material in the Museum of Comparative Zoölogy at my disposal, and to Dr. Frank M. Chapman and Mr. John T. Zimmer of the American Museum of Natural History and to Dr. Alexander Wetmore and Dr. Herbert Friedmann of the Smithsonian Institution for a similar courtesy.

Lepidocolaptes leucogaster umbrosus, subsp. nov.

DARK WOODHEWER.

Type.—Male adult in breeding plumage, No. 7040, Collection of Robert T. Moore; between Guirocoba and San Jose, Sonora, Mexico; May 15, 1933; Collected by Robert T. Moore; Original No. M-B52.

Sub-specific characters.—Nearest to Lepidocalaptes leucogaster (Swainson), but size smaller, particularly tail; light colored portions of plumage—pileum, nape, upper back and entire under parts—whiter, and dark parts of same much blacker; greater wing-coverts grayer, about Drab.²

¹Contribution from the California Institute of Technology, Pasadena, California.

²Capitalized names of colors in paper are taken from Ridgway, Color Standards and Color Nomenclature, 1912.

Geographical distribution.—Extreme southeastern Sonora (near Guirocoba and Muri), portions of Chihuahua (Hacienda de San Rafael, Mina Abundancia and Carmen), Sinaloa (Santa Gertrudis), and possibly Nayarit (Sierra Madre) and northern Jalisco (Sierra Bolanos).

Description of type.—Adult male, No. 7040. Pileum and hind neck between Fuscous-Black and Clove-Brown, each feather centered by a broad guttate spot of almost pure white, becoming slightly buffy white on hind neck. Back, scapulars, and lesser wing-coverts Saccardo's Umber, the upper back having the guttate spots of the pileum continued posteriorly for a short distance in narrower shaft-streaks, these margined by narrow lines of Fuscous-Black, the outer portion of each feather being Saccardo's Umber; middle and greater wing-coverts Drab; remiges between Walnut-Brown and Kaiser-Brown including their bases, but distal two-thirds of inner web of outer primary Clove-Brown, this color area decreasing on each succeeding primary; a large triangular spot of Clove-Brown near the tip of the inner webs of the secondaries, generally absent on tertiaries; rump and upper tail-coverts Hazel: rectrices Chestnut-Brown, the median rectrices including the shafts Hazel; under side of rectrices Fawn color, the shafts yellowish; superciliary stripe gravish white widening into a postocular stripe of the same color; the greater portion of the postocular and auricular region white, each feather bordered by Fuscous-Black: suborbital and malar region grayish white; chin white; throat grayish white with a faint tone of very light buffy white, the lower throat margined on each side by one or two very narrow streaks of dusky; the feathers of the extreme lower throat and malar region narrowly margined with the same; foreneck and chest grayish white or very pale buffy white, the feathers more narrowly margined with Fuscous, creating a squamate appearance; rest of under-parts similar, but the large guttate spots of the upper chest becoming more narrow posteriorly, particularly on the under-tail coverts and the blackish lines on each feather becoming submarginal instead of marginal, the feathers broadly edged with light Gravish Olive, the light Gravish Olive border on the posterior under tail-coverts occupying nearly two-thirds of each feather; under wing-coverts Pinkish Buff; posterior portion of under side of remiges Wood Brown; bend and edge of wing white with two or three fine streaks of dusky; maxilla Clove-Brown; mandible similar along tomia, but narrowly whitish along basal edge; legs and feet Blackish Brown (in dried skins). Wing 110.9; tail 88.7; exposed culmen 30.8; tarsus 19.2; middle toe minus claw 14.1.3

Female Adult.—Similar to male.

Male Juvenile.—Similar to adults, but dark portions of feathers of pileum, nape, upper back and under parts black; rest of back Light Brownish Olive with two or three very indistinct fine bars of black; the light mesial portion of feathers on the abdomen and under tail-coverts much more irregular and obscure.

³Wing is measured without flattening; tarsus is measured for this paper only from middle point of joint between the tibia and metatarsus behind to anterior edge of first divided scute, anterior to lowest undivided scute; middle toe is measured from the last point mentioned to distal end of toe, where its integument ends on base of claw. Mr. van Rossem tells me he employed the same method of measuring on the Temascaltepec birds.

Specimens examined.—Twenty-five specimens of umbrosus from Sonora, Sinaloa and Chihuahua; nine specimens of leucogaster from Temascaltepec, Puebla, Vera Cruz and Oaxaca; and thirty-two specimens from Nayarit, Jalisco, Colima, Michoacan and Guerrero.

Remarks.—The type of Xiphorhynchus leucogaster Swainson came from Temascaltepec not far from Mexico City. I have examined a specimen in the Smithsonian Institution collection, labelled Vera Cruz, and Mr. Adriaan J. van Rossem has kindly permitted me to use his measurements made in European museums of two specimens from the type locality at Temascaltepec. These with several others from "near City of Mexico" and Puebla may be considered topotypical material. The new race, from southern Sonora and northern Sinaloa, seems to be a well-marked form, in general considerably darker in all its browner shades, but lighter—almost white—where true leucogaster is buffy. The measurements of wing, tail and exposed culmen are all considerably smaller, but the greatest disparity occurs in the last two.

A note in Brewster's handwriting, at the Museum of Comparative Zoölogy proves that he detected a difference between birds from Chihuahua, and the specimen which he had seen in the National Museum from Verreaux's collection, labelled "Picolaptes leucogaster." He wrote they "are considerably duller and graver above, the back and wing-coverts being decidedly tipped with ashy, and beneath the light ground color is whiter or less buffy, the dark markings duller. These differences may be due to season . . . , however there is a marked difference in size. Mr. Frazar's besides being smaller with decidedly shorter slenderer bills." I have had under examination a much larger series of birds with considerable fresh material, the collecting dates covering all seasons of the year. Although there are undoubtedly some minor changes of color due to season, these do not account for all the dissimilarities and certainly not for the disparity in size. The type specimen was collected on May 15th by the author as it was clinging beside a hole to the under side of a large Sabina tree and its testes were greatly enlarged. I have compared it with three specimens, also collected in the middle of May, from La Laja in Jalisco. These Jalisco specimens have chins and throats much more buffy, all the lighter markings of the under-parts and head somewhat more buffy and the background of the crown and nape a lighter more snuff brown. Three specimens from Carmen in northern Chihuahua, collected in December and January, are slightly more buffy and the tail and exposed culmen average somewhat larger. Birds from farther south in Chihuahua at Mina Abundanci and Hacienda de San Rafael, although varying slightly, approximate true umbrosus.

It is unwise with the present paucity of data on the faunal areas of Sinaloa and states farther south to attempt to define precisely the limits of the range of this species. The author is assembling extensive new collections from this area with the expectation of publishing a report on distribution, which it is hoped will determine the faunal areas. Meanwhile it can be presumed that the range of the new race extends south along the Sierras probably as far as Nayarit and at altitudes ranging from

2000 to at least 6500 feet. Jalisco (and possibly Nayarit) seems to be an area of intermediates. The twenty-three specimens from Jalisco represent considerable individual variation, between the two forms, but none of them are true *umbrosus*. A specimen from Bolanos in northern Jalisco, although possessing a much longer bill, has the wing measurement of *umbrosus*, whereas specimens from Los Masos and one from Zapotlan in eastern Jalisco have very long wings, measuring 7 to 8 mm. longer than the type from Sonora. As would be expected, the Vera Cruz bird is the largest, possessing a wing 10 mm. longer than the type and a tail 11 mm. longer. Most of the birds from Colima, Michoacan and Guerrero are true *leucogaster*, but one or two are intermediate. The only juvenile in the sixty-six specimens of the two races examined, is a specimen taken by a collector at Santa Gertrudis in northeastern Sinaloa May 27, 1933. This bird has well-developed wings but a tail and bill only half the length of the adults. It is described above.

MALES	Wing	Tail	Exposed culmen	Tarsus	Middle toe minus claw
Breeding adult from Sonora Type of umbrosus		88.7	30.8	19.2	14.1
Thirteen adults from Sonora, Sinaloa, Chihuahua (umbrosus)	110.7	91.41	31.15	19.4	15.
Four adults from Temascaltepec, Mexico City, Puebla, Vera Cruz (leucogaster)		101.56	35.2 ⁷	20.8	16.26
Twelve adults from Sonora, Sinaloa, Chihuahua (um- brosus)		85.3	32.4	19.8	15.2
Two adults from Temascal- tepec, Tenango del Valle (leucogaster)		98.3	37.8	20.4	15.3

⁴Seven specimens.

⁵Twelve specimens.

⁶Two specimens.

⁷Three specimens.

⁸One specimen.